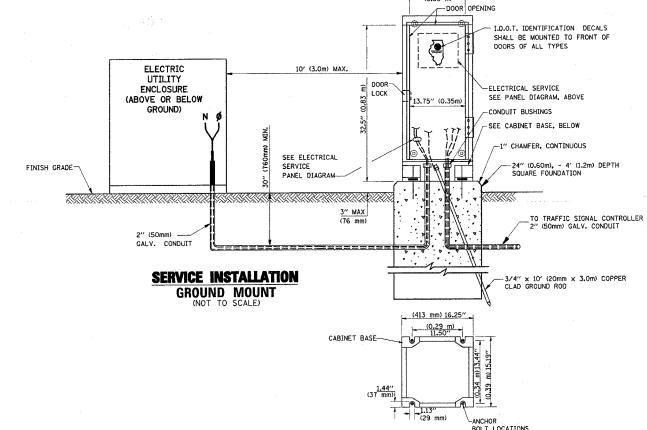


ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)

SERVICE INSTALLATION POLE MOUNT (SHOWN) 13.75" (0.35 m)



CABINET - BASE BOLT PATTERN

NOTES:

- HANDHOLE COVER

DETAIL "A"

HANDHOLE COVER

HANDLE

DETAIL "B"

RECESSED COVER

-U.L. LISTED

HEAVY DUTY COPPER COMPRESSION

GROUNDING CABLE
(PAID FOR SEPARATELY)

GROUND CABLES TO CONTROLLER DOUBLE HANDHOLE

TO POLE OR

POST AS REQ'D.

-- SEE DETAIL "B"

CAST CORNER FRAME WEB

SHALL BE APPLIED ON ALL BOLT/ CONNECTION ASSEMBLIES. -STAINLESS STEEL NUT AND 2 STAINLESS

SEE DETAIL "A"

(2) 1/2" \times 1 1/4" STAINLESS STEEL BOLT WITH SPLIT LOCK WASHER AND NYLON INSERT LOCKOUT WELDED TO

EXISTING HANDHOLE

EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)

FRAME AND COVER

ANTI-CORROSION COMPOUND -

STEEL WASHERS

CABLE HOOKS

HANDHOLES

FRAME AND TO COVER. (TYPICAL)

REQUIRED. ALL

UL LISTED GROUND -COMPRESSION CONNECTOR

UL LISTED GROUND

COMPRESSION CONNECTOR -WITH STAINLESS STEEL NUT

-1/C *6

(GREEN)

HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)

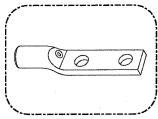
HANDHOLE FRAME

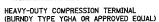
GROUNDING SYSTEM

F.A.P. RTE.	SECTION	. 0	OUNT.	Y	SHEETS	SHEET
342	530 N-2		COOK		53	46.
STA.		TO	STA.			
FED. ROAD	DIST. NO.	ILLINOIS	FED.	AID	PROJEC1	•
CONTRAC	T NO SOAS!					

1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE $3/4^{\prime\prime}$ DIA. imes 10'-0" (20mm imes 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS. THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.

- 2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
- 3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
- 4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



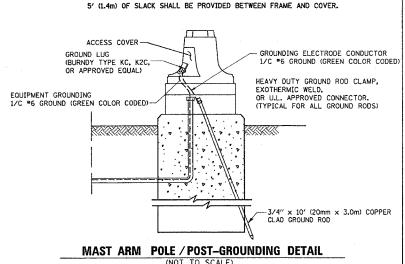




3/4" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EUAL)

NOTES:

• ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED. • GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES.



BUREAU OF TRAFFIC 1/01/0

ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT 1

STANDARD TRAFFIC SIGNAL DESIGN DETAILS

DATE 1/20/2006

SCALE: VERT. NONE

galbannb

REVISION DATE: 01/01/02